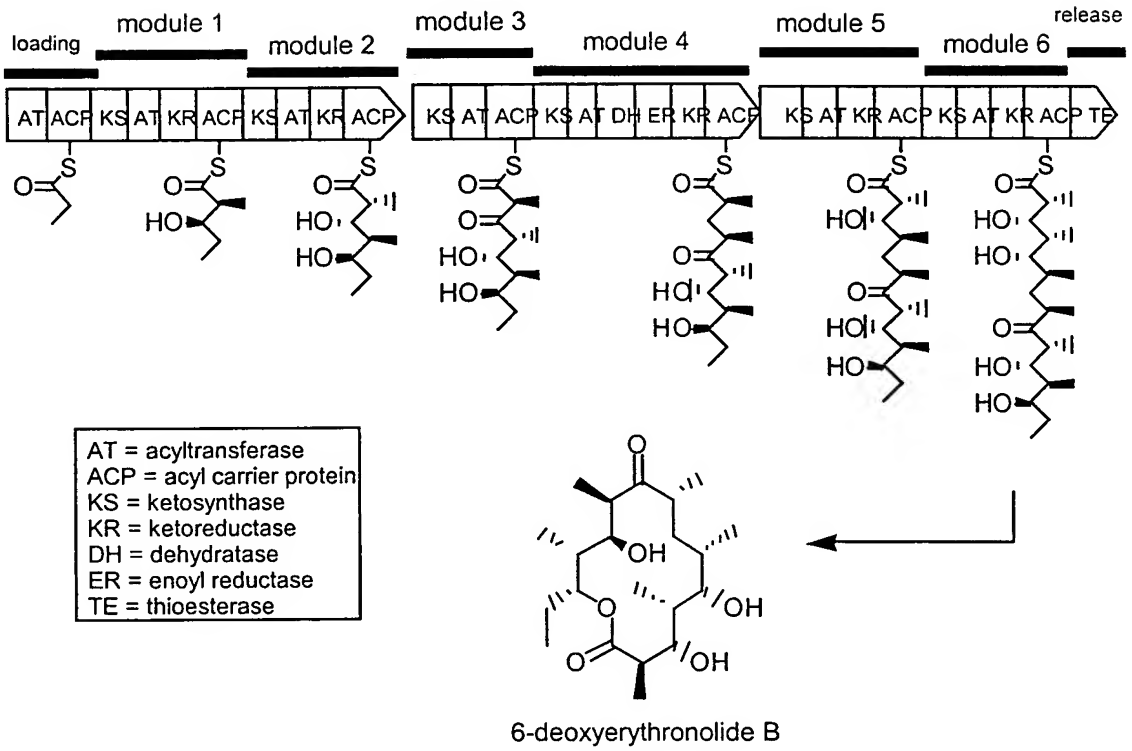

Figure 1

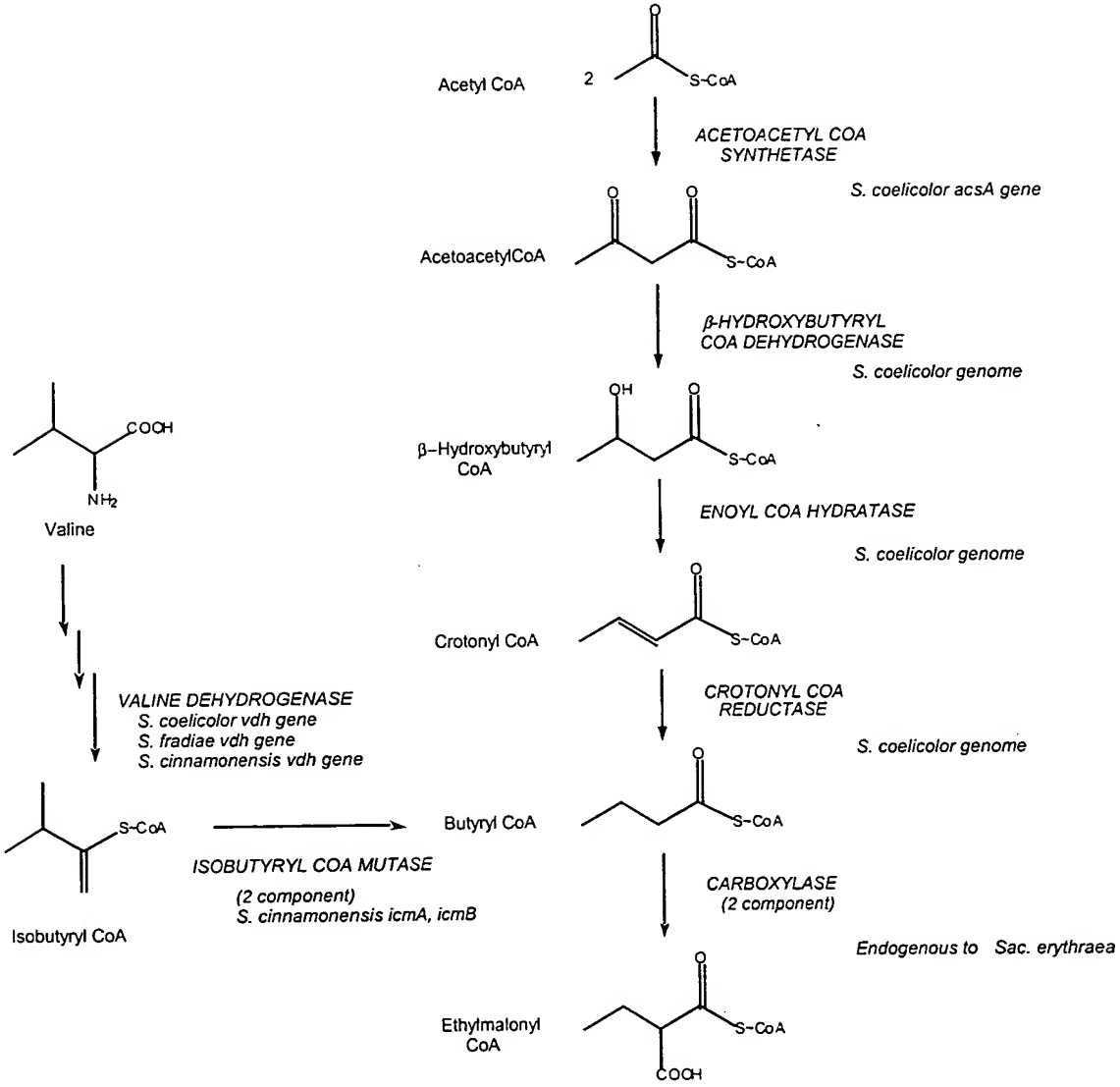

Figure 2

```
gatctggatg tcgaagccgg gacggagcgg gatgacggcg tcagcggcgt cttccatgtg 60
gaactcctta tccggacgac tcgacctggt tggctaagcg gagattaggt ctgcgcgcgc 120
gaaaccgccc agcggagcgc cgagatcctc acctgatcag gtaaggatct tcattcgatg 180
tcatgtagcc agatttcggc tgaactggtc cacgatcccg attcgtgacc atgcgtgtcc 240
actttggagc gggtgcgttc gttcggccta gtggcgtgct ccgcggtgat caagtgttag 300
gttagcctca gctcagcggg gtcgacggat ggagtgaacg gc gtg gcg ggc gac    354
                                          Val Ala Gly Asp
                                           1

gtg gaa ctc gcg gac agg gct cga cga cgc gcg tgc cgg ctg ctc agg   402
Val Glu Leu Ala Asp Arg Ala Arg Arg Arg Ala Cys Arg Leu Leu Arg
 5                  10                  15                  20

            XbaI
cgt tgg ctg gcc gag acg cac act ccg gtg gag ccc ggc ccg ctg tcc   450
Arg Trp Leu Ala Glu Thr His Thr Pro Val Glu Pro Gly Pro Leu Ser
                25                  30                  35

ctg cgg atc ggc ccg gtg cgg gtg tcg gcc gag gtc gct tac cgc tcg   498
Leu Arg Ile Gly Pro Val Arg Val Ser Ala Glu Val Ala Tyr Arg Ser
            40                  45                  50

ccg acg ggc gcc cac ggg ttc ggc ccg atc cgc gtc ctc gat gcc gag   546
Pro Thr Gly Ala His Gly Phe Gly Pro Ile Arg Val Leu Asp Ala Glu
        55                  60                  65

ggt gtg ccg gtg gcg ctc gcc gat ccg gtg ctg ctg gcg gcc gcc tgc   594
Gly Val Pro Val Ala Leu Ala Asp Pro Val Leu Leu Ala Ala Ala Cys
    70                  75                  80

tcg gcg gac tcg cgg agc cgc tcg ctg ccg agc gcg ccg atc aac gcc   642
Ser Ala Asp Ser Arg Ser Arg Ser Leu Pro Ser Ala Pro Ile Asn Ala
85                  90                  95                  100

ccg gac gcc ggt acc gct gtc gac tgg gtg ctc tcg tcg ctc gcc gac   690
Pro Asp Ala Gly Thr Ala Val Asp Trp Val Leu Ser Ser Leu Ala Asp
                105                 110                 115

gac gag gac gac gag gtg ccc gcc ggc atg acc gcg gag gag gcg gtg   738
Asp Glu Asp Asp Glu Val Pro Ala Gly Met Thr Ala Glu Glu Ala Val
            120                 125                 130

cgc ctg ctg tcg cgg cag gtc gac gac ctg ccg cgg tcg ccg ggc gcc   786
Arg Leu Leu Ser Arg Gln Val Asp Asp Leu Pro Arg Ser Pro Gly Ala
        135                 140                 145

gac ccg tgg tcg ctg gtc gcc ggc ccg ctg gcg gcc atc ggg cgg ttc   834
Asp Pro Trp Ser Leu Val Ala Gly Pro Leu Ala Ala Ile Gly Arg Phe
    150                 155                 160

ggg cgg gcc ggg atc gcc gac gag tgc tgg ttg ctg gag gtg ctc gcc   882
Gly Arg Ala Gly Ile Ala Asp Glu Cys Trp Leu Leu Glu Val Leu Ala
165                 170                 175                 180
```

Figure 3 A

```
ggg cgg ctc cgc gcg gtc gac gac gac ctg tcc cgc tcg tgg ctg agc   930
Gly Arg Leu Arg Ala Val Asp Asp Asp Leu Ser Arg Ser Trp Leu Ser
                185                 190                 195

agt ccg acg ctc gcc gac cgc gct gtg ctc gtg ggt gag ggg ttg cgc   978
Ser Pro Thr Leu Ala Asp Arg Ala Val Leu Val Gly Glu Gly Leu Arg
            200                 205                 210

tac cgg ccg gat gtg cgg ccg gtg ccg ttc gac gtg ccg aac ccg ctg   1026
Tyr Arg Pro Asp Val Arg Pro Val Pro Phe Asp Val Pro Asn Pro Leu
        215                 220                 225

cac gag ggc aag tcc gac gtc ccg ccg ccg ccc gtg ccc gtg ctg ggc   1074
His Glu Gly Lys Ser Asp Val Pro Pro Pro Pro Val Pro Val Leu Gly
    230                 235                 240

ggg ccg tgg tcg ctg cgt ccg gtc gag gtc gcg gtc cac ggg gat ggc   1122
Gly Pro Trp Ser Leu Arg Pro Val Glu Val Ala Val His Gly Asp Gly
245                 250                 255                 260

ggg cct gac gtc gca ctg gtg cac cgc tgg atg aac acc ccg cac gtc   1170
Gly Pro Asp Val Ala Leu Val His Arg Trp Met Asn Thr Pro His Val
                265                 270                 275

gcg cac cac tgg aac cag gcg tgg ccg ctg gag cgc tgg cgg gag gaa   1218
Ala His His Trp Asn Gln Ala Trp Pro Leu Glu Arg Trp Arg Glu Glu
            280                 285                 290

ctc gcc cac cag ctc ggc ggt gag cac tcc ctg ccc tgc gtg gtc gga   1266
Leu Ala His Gln Leu Gly Gly Glu His Ser Leu Pro Cys Val Val Gly
        295                 300                 305

cac gag gga cgc gag gtc gcg tat ctg gag ctc tac cgg gtg acc cgc   1314
His Glu Gly Arg Glu Val Ala Tyr Leu Glu Leu Tyr Arg Val Thr Arg
    310                 315                 320

    HindIII
gac aag ctt gcg ggc tgc tac ccg tac ggg ccg cac gac ctc ggg gtc   1362
Asp Lys Leu Ala Gly Cys Tyr Pro Tyr Gly Pro His Asp Leu Gly Val
325                 330                 335                 340

cac atc gcg atc ggc gag cgg gag gtg ctc ggg cgc ggt ttc ggg tcg   1410
His Ile Ala Ile Gly Glu Arg Glu Val Leu Gly Arg Gly Phe Gly Ser
                345                 350                 355

tcg ctg ctg cgc gcg gtc gcg ggt gcg ctg ctg gac gcc gat ccg cgg   1458
Ser Leu Leu Arg Ala Val Ala Gly Ala Leu Leu Asp Ala Asp Pro Arg
            360                 365                 370

tgc gcg cgg gtg gtc gcc gag ccg aat gtg cac aac gag gct tcg gtg   1506
Cys Ala Arg Val Val Ala Glu Pro Asn Val His Asn Glu Ala Ser Val
        375                 380                 385
```

Figure 3 B

```
cgc gcc ttc gcc aag gcc ggg ttc gtc cgg gag agg gag atc ggc ctg   1554
Arg Ala Phe Ala Lys Ala Gly Phe Val Arg Glu Arg Glu Ile Gly Leu
    390                 395                 400

ccc gcc aag aac tcg gct ctg atg gtc ttc tcc cgg gtc t gacgaccggt  1604
Pro Ala Lys Asn Ser Ala Leu Met Val Phe Ser Arg Val (SEQ ID NO:2)
405                 410                 415

catgcccctg tgtgaacgcg tgagtaagcg caccgtgacg tgatcccccg cttgaaccaa 1664
ggttagcctt acttttattg gtggagaacg atgccggagc gctccgccgt gtcgttgccg 1724
ctgaccacag cgcagtaggg catctggttc gcccagcaac tcgaccggac gaacccgatc 1784
tacaacaccg gcgagtgcgt cgagatcagc ggcccggtgg agccggtggt gttcgagcag 1844
gccctgcggt ggggcgtggc ggaggccgag gcgctgcgag cccgcgtggt cgtcgacggc 1904
gacgagccgc gccaggtcgt ggagccggag gtggacttcc cgctgccgtg ctcgacgtca 1964
gcgccgaggc ggaccc (SEQ ID NO:1)                                   1980
```

Figure 3 C

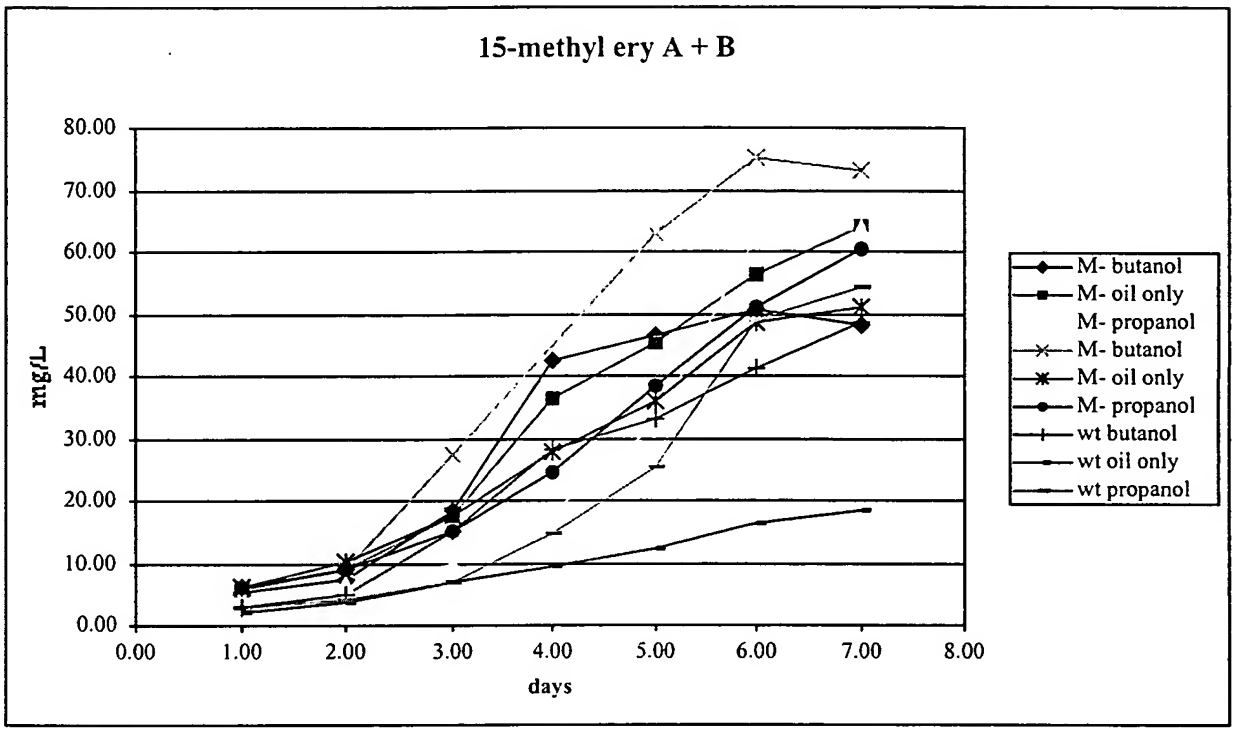

Figure 4

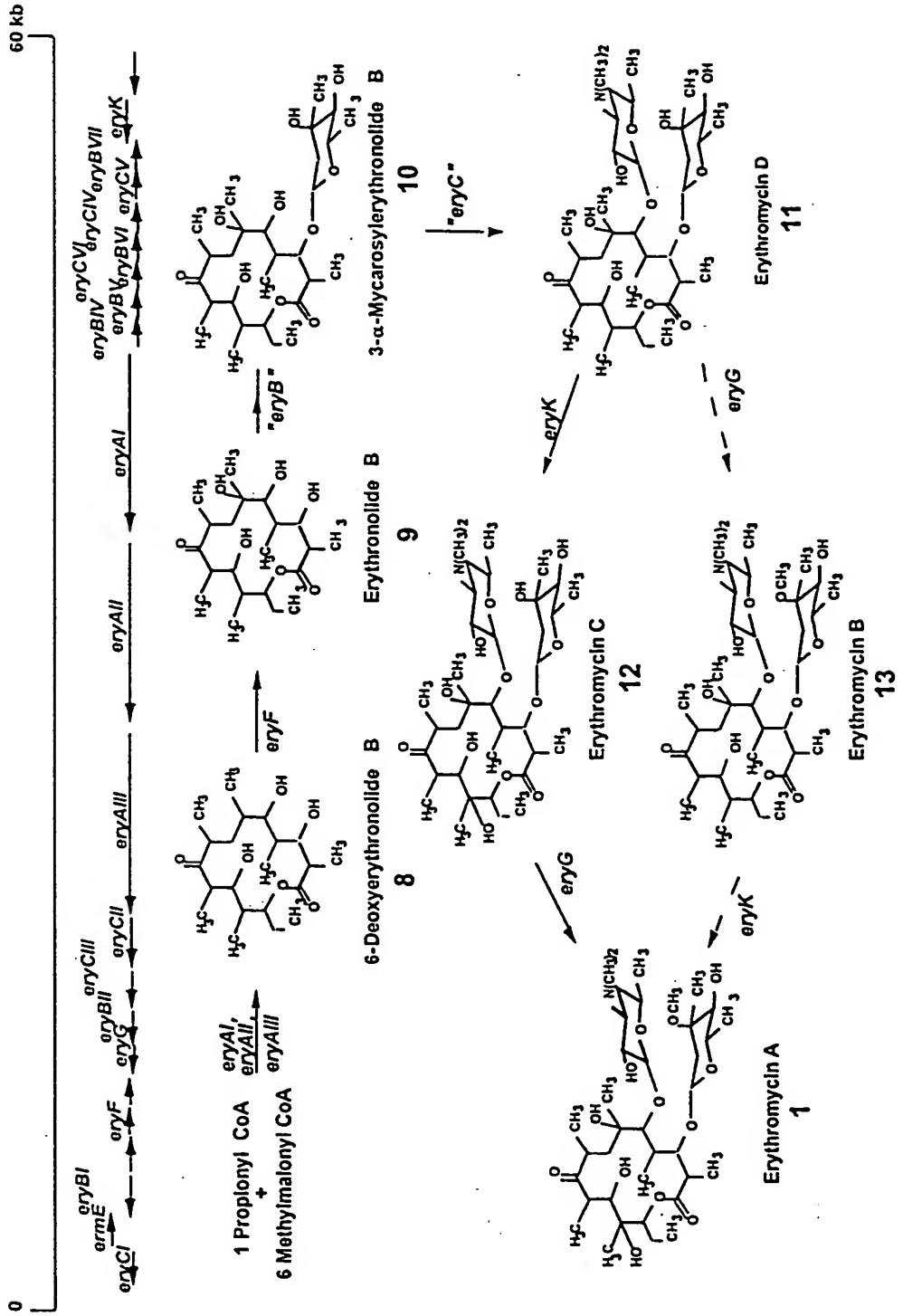

Figure 5

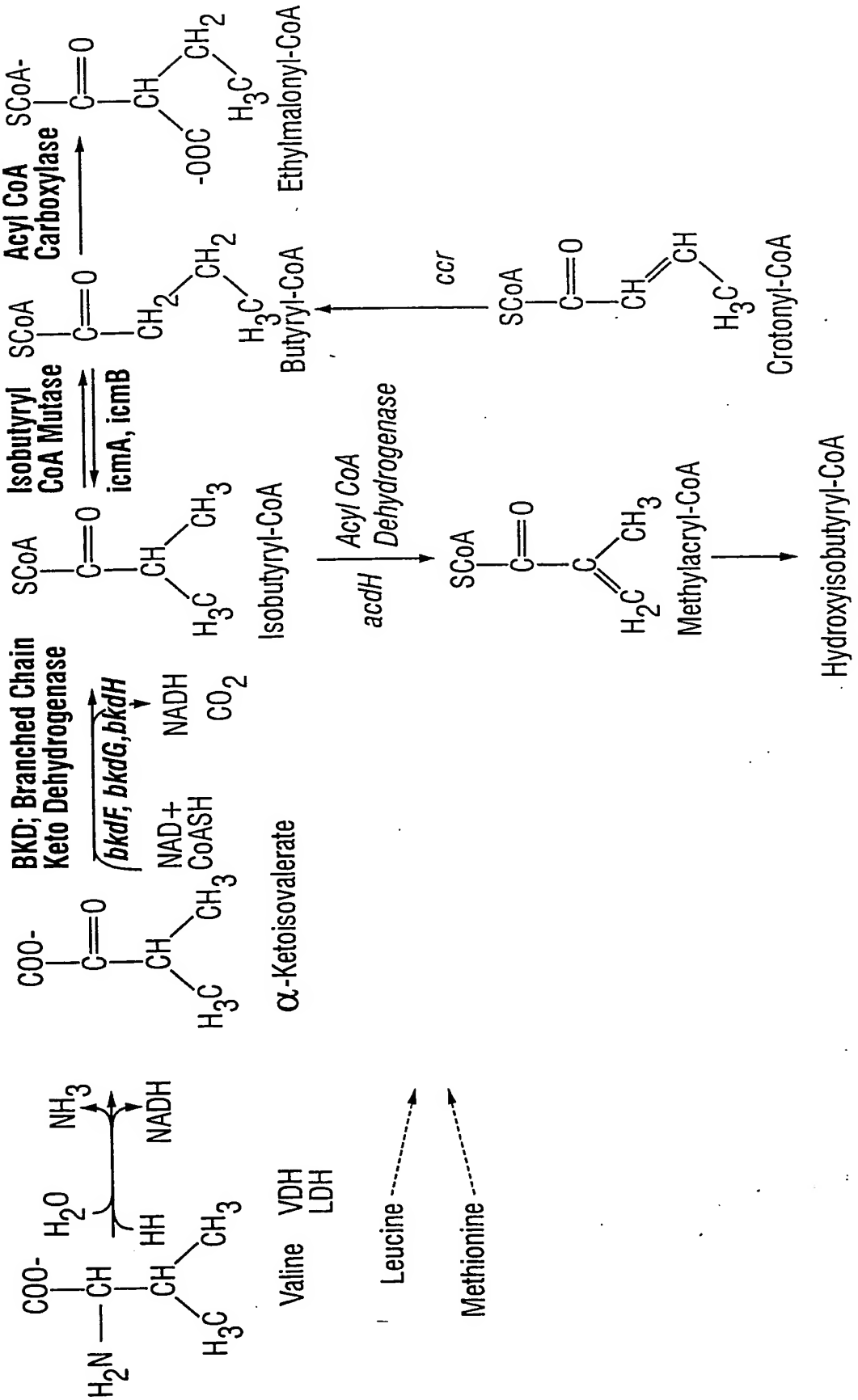

Figure 6 A

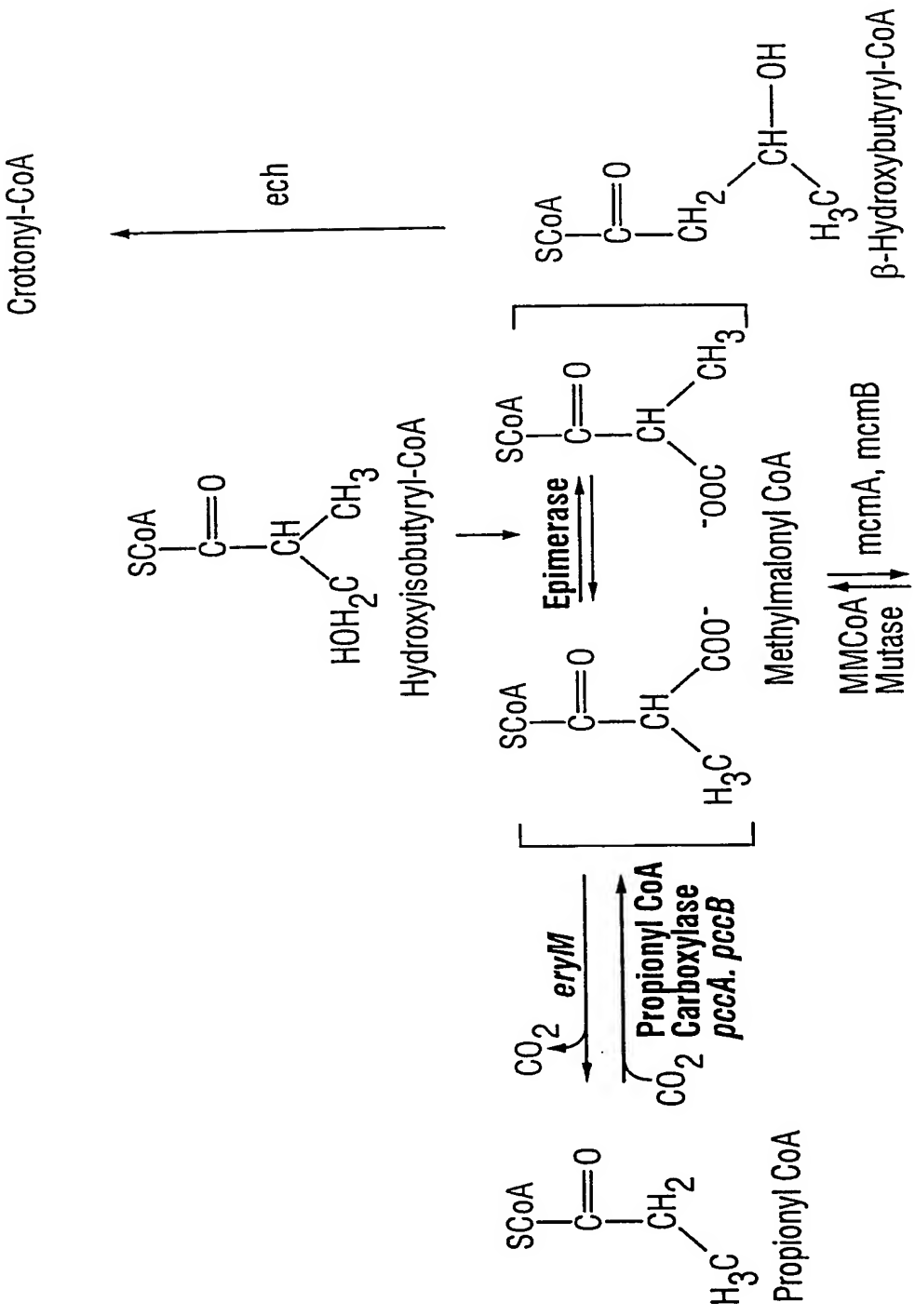

Figure 6 B

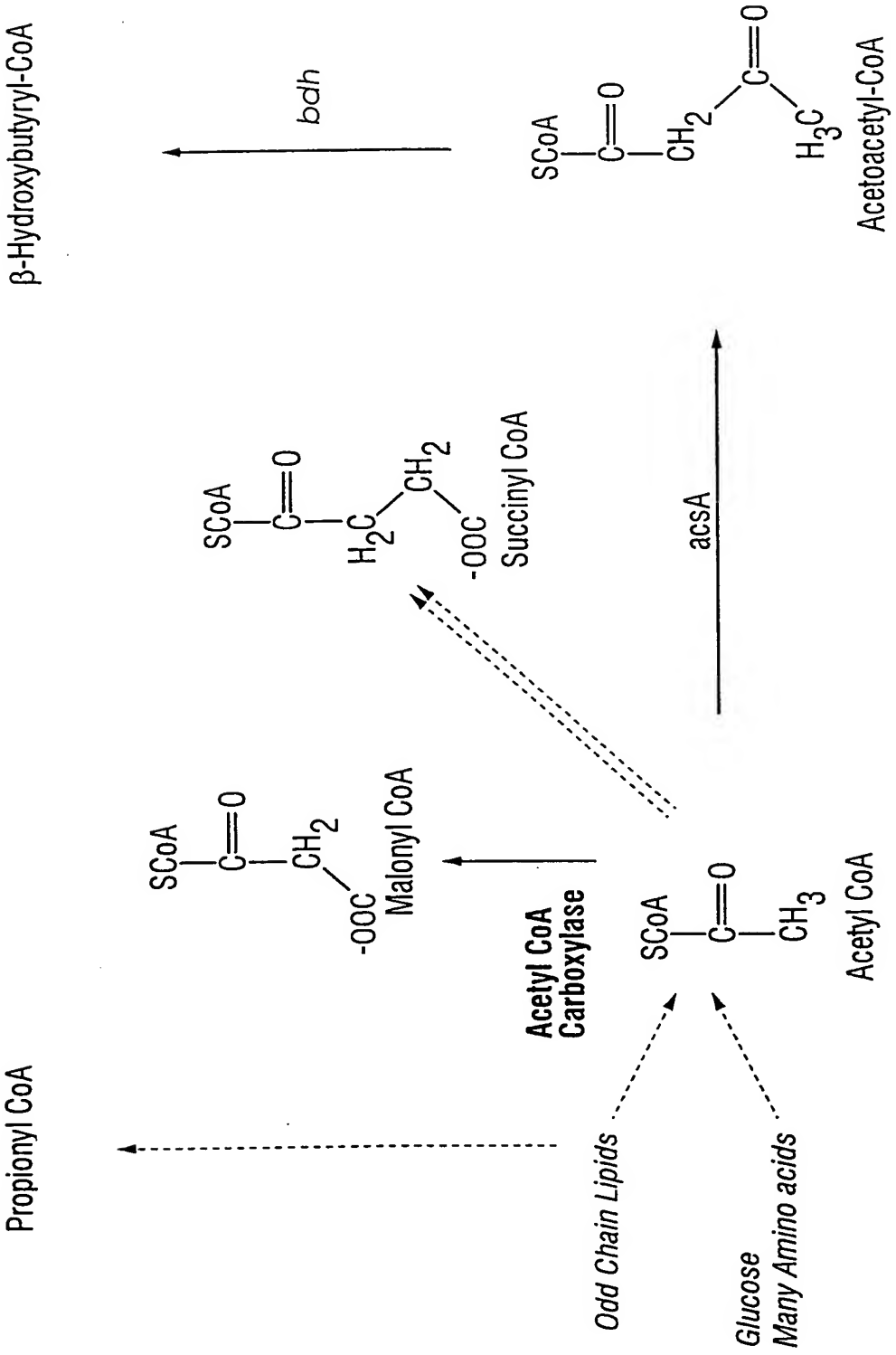

Figure 6 C

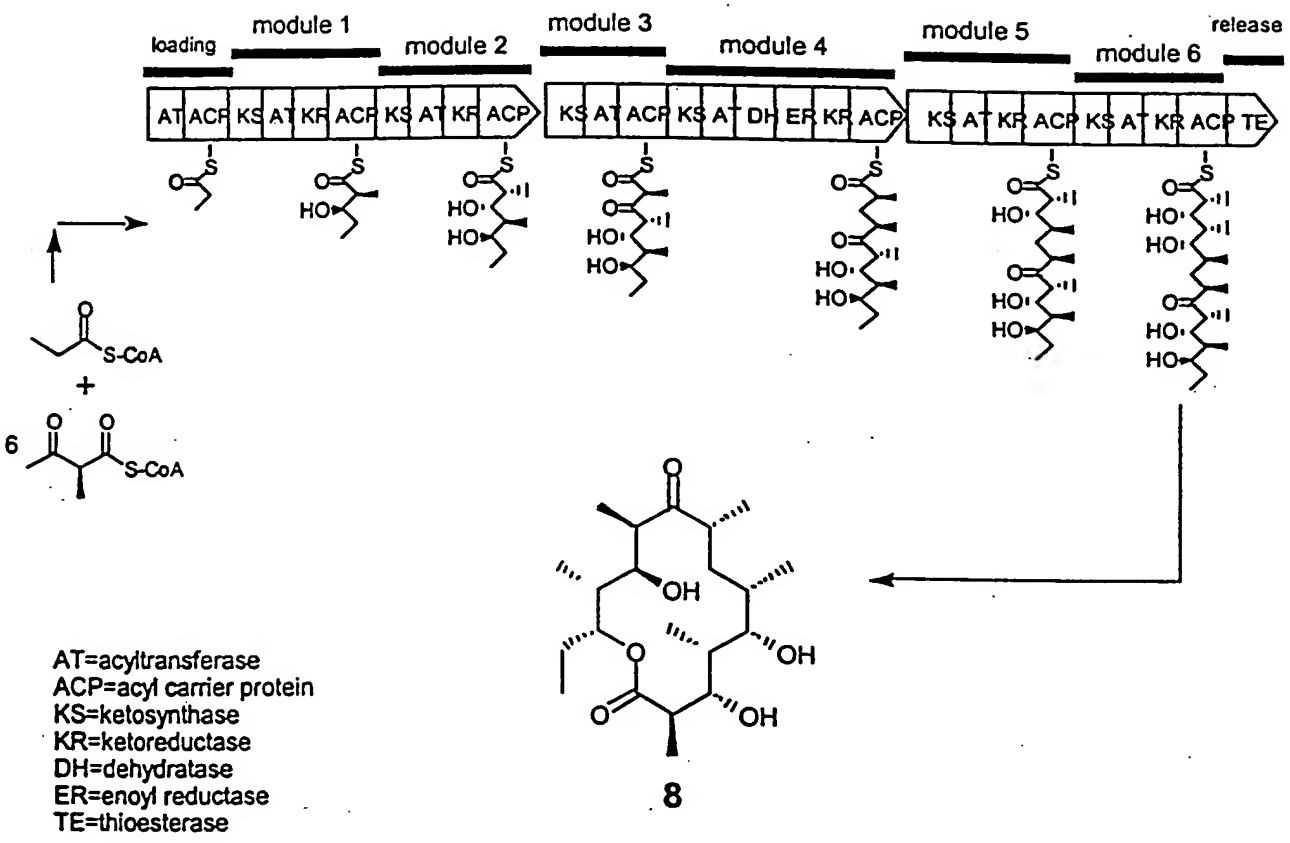

Figure 7

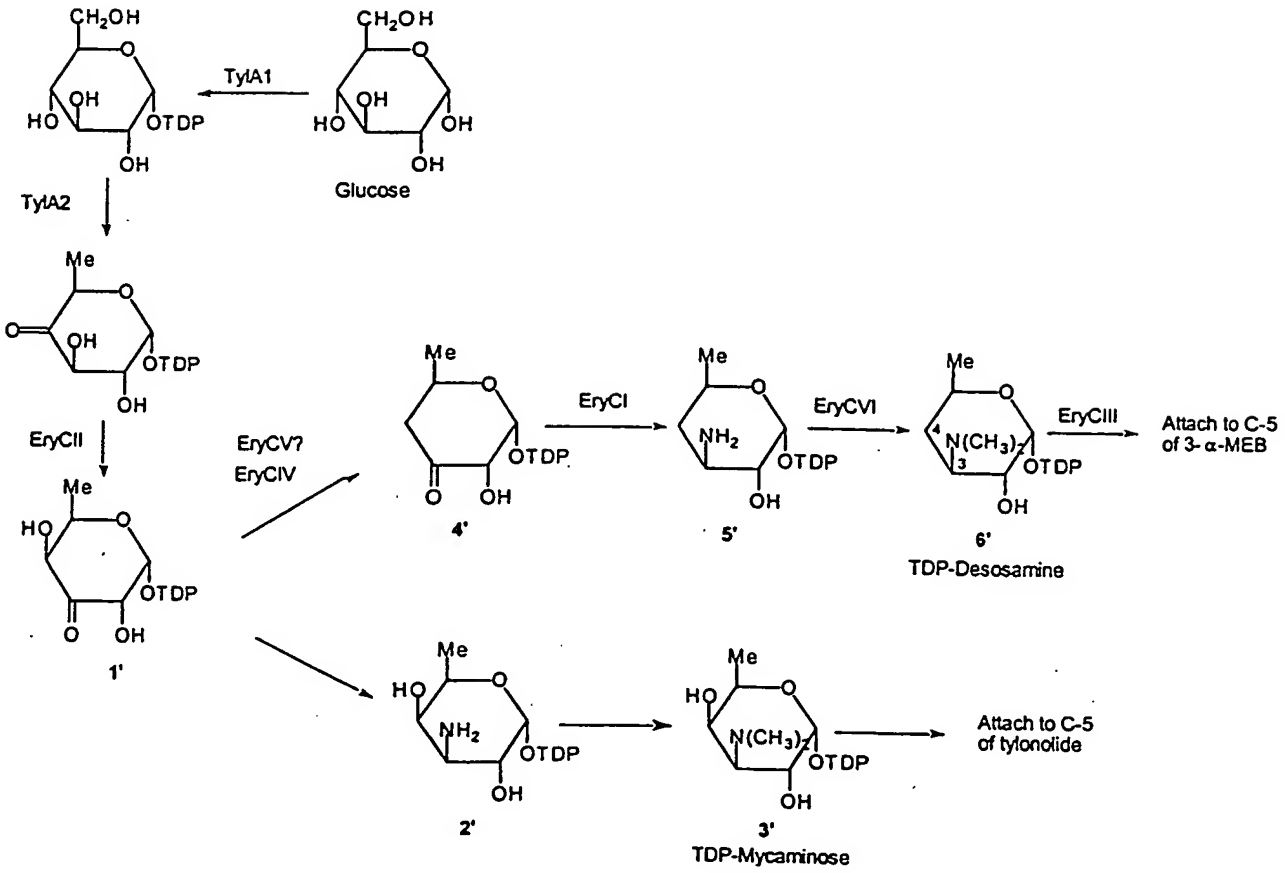

Figure 8

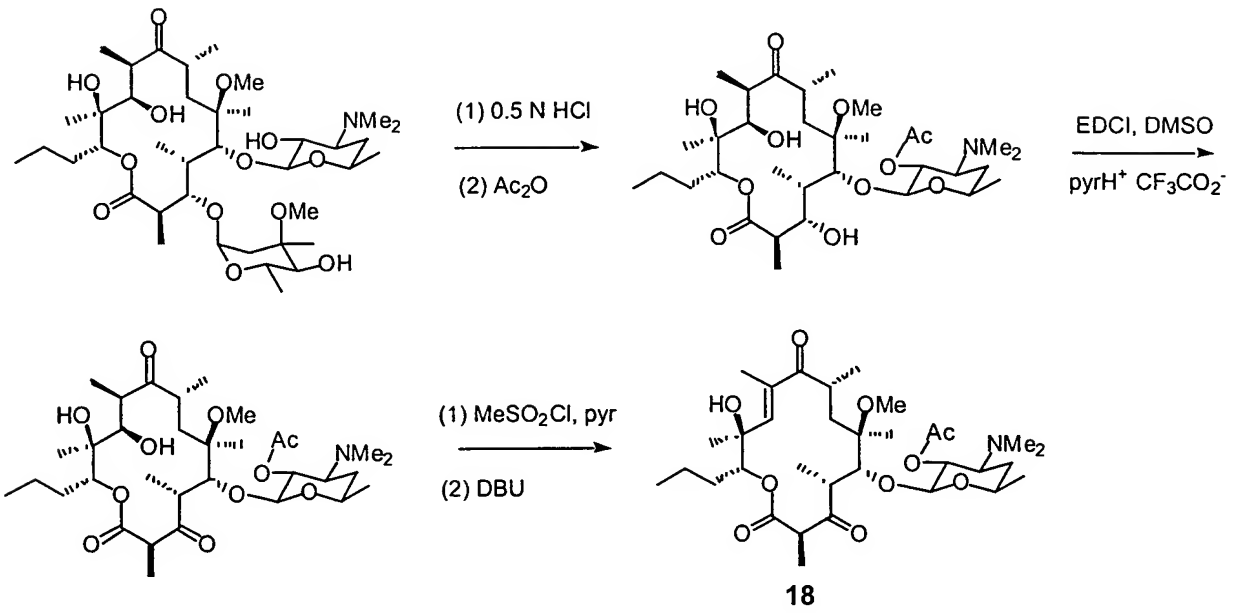

Figure 9

```
Met His Val Pro Gly Glu Glu Asn Gly His Ser Ile Ala Ile Val Gly
 1               5                  10                  15
Ile Ala Cys Arg Leu Pro Gly Ser Ala Thr Pro Gln Glu Phe Trp Arg
            20                  25                  30
Leu Leu Ala Asp Ser Ala Asp Ala Leu Asp Glu Pro Pro Ala Gly Arg
        35                  40                  45
Phe Pro Thr Gly Ser Leu Ser Ser Pro Pro Ala Pro Arg Gly Gly Phe
    50                  55                  60
Leu Asp Ser Ile Asp Thr Phe Asp Ala Asp Phe Phe Asn Ile Ser Pro
65                  70                  75                  80
Arg Glu Ala Gly Val Leu Asp Pro Gln Gln Arg Leu Ala Leu Glu Leu
                85                  90                  95
Gly Trp Glu Ala Leu Glu Asp Ala Gly Ile Val Pro Arg His Leu Arg
            100                 105                 110
Gly Thr Arg Thr Ser Val Phe Met Gly Ala Met Trp Asp Asp Tyr Ala
        115                 120                 125
His Leu Ala His Ala Arg Gly Glu Ala Ala Leu Thr Arg His Ser Leu
    130                 135                 140
Thr Gly Thr His Arg Gly Met Ile Ala Asn Arg Leu Ser Tyr Ala Leu
145                 150                 155                 160
Gly Leu Gln Gly Pro Ser Leu Thr Val Asp Thr Gly Gln Ser Ser Ser
                165                 170                 175
Leu Ala Ala Val His Met Ala Cys Glu Ser Leu Ala Arg Gly Glu Ser
            180                 185                 190
Asp Leu Ala Leu Val Gly Gly Val Asn Leu Val Leu Asp Pro Ala Gly
        195                 200                 205
Thr Thr Gly Val Glu Arg Phe Gly Ala Leu Ser Pro Asp Gly Arg Cys
    210                 215                 220
Tyr Thr Phe Asp Ser Arg Ala Asn Gly Tyr Ala Arg Gly Glu Gly Gly
225                 230                 235                 240
Val Val Val Val Leu Lys Pro Thr His Arg Ala Leu Ala Asp Gly Asp
                245                 250                 255
Thr Val Tyr Cys Glu Ile Leu Gly Ser Ala Leu Asn Asn Asp Gly Ala
            260                 265                 270
Thr Glu Gly Leu Thr Val Pro Ser Ala Arg Ala Gln Ala Asp Val Leu
        275                 280                 285
Arg Gln Ala Trp Glu Arg Ala Arg Val Ala Pro Thr Asp Val Gln Tyr
    290                 295                 300
Val Glu Leu His Gly Thr Gly Thr Pro Ala Gly Asp Pro Val Glu Ala
305                 310                 315                 320
Glu Gly Leu Gly Thr Ala Leu Gly Thr Ala Arg Pro Ala Glu Ala Pro
                325                 330                 335
Leu Leu Val Gly Ser Val Lys Thr Asn Ile Gly His Leu Glu Gly Ala
            340                 345                 350
Ala Gly Ile Ala Gly Leu Leu Lys Thr Val Leu Ser Ile Lys Asn Arg
        355                 360                 365
His Leu Pro Ala Ser Leu Asn Phe Thr Ser Pro Asn Pro Arg Ile Asp
    370                 375                 380
Leu Asp Ala Leu Arg Leu Arg Val His Thr Ala Tyr Gly Pro Trp Pro
385                 390                 395                 400
Ser Pro Asp Arg Pro Leu Val Ala Gly Val Ser Ser Phe Gly Met Gly
                405                 410                 415
```

Figure 10 A

```
Gly Thr Asn Cys His Val Val Leu Ser Glu Leu Arg Asn Ala Gly Gly
            420                 425                 430
Asp Gly Ala Gly Lys Gly Pro Tyr Thr Gly Thr Glu Asp Arg Leu Gly
        435                 440                 445
Ala Thr Glu Ala Glu Lys Arg Pro Asp Pro Ala Thr Gly Asn Gly Pro
    450                 455                 460
Asp Pro Ala Gln Asp Thr His Arg Tyr Pro Pro Leu Ile Leu Ser Ala
465                 470                 475                 480
Arg Ser Asp Ala Ala Leu Arg Ala Gln Ala Glu Arg Leu Arg His His
                485                 490                 495
Leu Glu His Ser Pro Gly Gln Arg Leu Arg Asp Thr Ala Tyr Ser Leu
            500                 505                 510
Ala Thr Arg Arg Gln Val Phe Glu Arg His Ala Val Val Thr Gly His
        515                 520                 525
Asp Arg Glu Asp Leu Leu Asn Gly Leu Arg Asp Leu Glu Asn Gly Leu
    530                 535                 540
Pro Ala Pro Gln Val Leu Leu Gly Arg Thr Pro Thr Pro Glu Pro Gly
545                 550                 555                 560
Gly Leu Val Phe Val Phe Pro Gly Gln Gly Pro Gln Trp Arg Gly Met
                565                 570                 575
Gly Val Glu Leu Met Ala Ala Ser Pro Val Phe Ala Ala Arg Met Arg
            580                 585                 590
Gln Cys Ala Asp Ala Leu Ile Pro His Thr Gly Trp Asp Pro Ile Ala
        595                 600                 605
Met Leu Asp Asp Pro Glu Val Thr Arg Arg Val Asp Val Val His Pro
    610                 615                 620
Val Cys Trp Ala Val Met Val Ser Leu Ala Ala Val Trp Glu Ala Ala
625                 630                 635                 640
Gly Val Arg Pro Asp Ala Val Ile Gly His Ser Gln Gly Glu Ile Ala
                645                 650                 655
Ala Ala Cys Val Ala Gly Ala Leu Thr Leu Glu Asp Gly Ala Arg Leu
            660                 665                 670
Val Ala Leu Arg Ser Val Leu Leu Leu Leu Arg Glu Leu Ala Gly Arg
        675                 680                 685
Gly Ala Met Gly Ser Val Ala Leu Pro Ala Ala Asp Val Glu Ala Asp
    690                 695                 700
Ala Ala Arg Ile Asp Gly Val Trp Val Ala Gly Arg Asn Gly Ala Thr
705                 710                 715                 720
Thr Thr Thr Val Ala Gly Arg Pro Asp Ala Val Glu Thr Leu Ile Ala
                725                 730                 735
Asp Tyr Glu Ala Arg Gly Val Trp Val Arg Arg Ile Ala Val Asp Cys
            740                 745                 750
Pro Thr His Thr Pro Phe Val Asp Pro Leu Tyr Asp Glu Leu Gln Arg
        755                 760                 765
Ile Val Ala Asp Thr Thr Ser Arg Thr Pro Glu Ile Pro Trp Phe Ser
    770                 775                 780
Thr Ala Asp Glu Arg Trp Ile Asp Ala Pro Leu Asp Asp Glu Tyr Trp
785                 790                 795                 800
Phe Arg Asn Met Arg His Pro Val Gly Phe Ala Thr Ala Val Thr Ala
                805                 810                 815
Ala Arg Glu Pro Gly Asp Thr Val Phe Val Glu Val Ser Ala His Pro
            820                 825                 830
```

Figure 10 B

```
Val Leu Leu Pro Ala Ile Asp Gly Ala Thr Val Ala Thr Leu Arg Arg
        835                 840                 845
Gly Gly Gly Val His Arg Leu Leu Thr Ala Leu Ala Glu Ala His Thr
    850                 855                 860
Thr Gly Val Pro Val Asp Trp Ala Ala Val Val Pro Ala Thr Ala Thr
865                 870                 875                 880
Ala His Asp Leu Pro Thr Tyr Ala Phe His His Glu Arg Tyr Trp Ile
                885                 890                 895
Ser His Trp Leu Pro Ser Gly Glu Ala His Pro Arg Pro Ala Asp Asp
            900                 905                 910
Thr Glu Ser Gly Thr Gly Arg Thr Glu Ala Ser Pro Pro Arg Pro His
        915                 920                 925
Asp (SEQ ID NO:3)
```

Figure 10 C

```
Met His Val Pro Gly Glu Glu Asn Gly Glu Pro Leu Ala Ile Val Gly
 1               5                  10                  15
Met Ala Cys Arg Leu Pro Gly Gly Val Ala Ser Pro Glu Asp Leu Trp
            20                  25                  30
Arg Leu Leu Glu Ser Gly Gly Asp Gly Ile Thr Ala Phe Pro Thr Asp
        35                  40                  45
Arg Gly Trp Asp Val Asp Gly Leu Tyr Asp Pro Asp Pro Asp His Pro
    50                  55                  60
Gly Thr Ser Thr Val Arg His Gly Gly Phe Leu Ala Gly Val Ala Asp
65                  70                  75                  80
Phe Asp Ala Ala Phe Phe Gly Ile Ser Pro Arg Glu Ala Leu Ala Met
                85                  90                  95
Asp Pro Gln Gln Arg Leu Val Leu Glu Thr Ser Trp Glu Ala Leu Glu
            100                 105                 110
His Ala Gly Ile Leu Pro Glu Ser Leu Arg Gly Ser Asp Thr Gly Val
        115                 120                 125
Phe Met Gly Ala Phe Ser Asp Gly Tyr Gly Leu Gly Thr Asp Leu Gly
    130                 135                 140
Gly Phe Gly Ala Thr Gly Thr Gln Thr Ser Val Leu Ser Gly Arg Leu
145                 150                 155                 160
Ser Tyr Phe Tyr Gly Leu Glu Gly Pro Ala Val Thr Val Asp Thr Ala
                165                 170                 175
Cys Ser Ser Ser Leu Val Ala Leu His Gln Ala Gly Gln Ser Leu Arg
            180                 185                 190
Ser Gly Glu Cys Ser Leu Ala Leu Val Gly Gly Val Thr Val Met Ala
        195                 200                 205
Ser Pro Ser Gly Phe Val Glu Phe Ser Gln Gln Arg Gly Leu Ala Pro
    210                 215                 220
Asp Ala Arg Cys Lys Ala Phe Ala Asp Ala Ala Asp Gly Thr Gly Phe
225                 230                 235                 240
Ala Glu Gly Ser Gly Val Leu Ile Val Glu Arg Leu Ser Asp Ala Glu
                245                 250                 255
Arg Asn Gly His Arg Val Leu Ala Val Val Arg Gly Ser Ala Val Asn
            260                 265                 270
Gln Asp Gly Ala Ser Asn Gly Leu Ser Ala Pro Asn Gly Pro Ser Gln
        275                 280                 285
Glu Arg Val Ile Arg Gln Ala Leu Ala Asn Ala Gly Leu Thr Pro Ala
    290                 295                 300
Asp Val Asp Ala Val Glu Ala His Gly Thr Gly Thr Arg Leu Gly Asp
305                 310                 315                 320
Pro Ile Glu Ala Gln Ala Val Leu Ala Thr Tyr Gly Gln Gly Arg Asp
                325                 330                 335
Thr Pro Val Leu Leu Gly Ser Leu Lys Ser Asn Ile Gly His Thr Gln
            340                 345                 350
Ala Ala Ala Gly Val Ala Gly Val Ile Lys Met Val Leu Ala Met Arg
        355                 360                 365
His Gly Thr Leu Pro Arg Thr Leu His Val Asp Thr Pro Ser Ser His
    370                 375                 380
Val Asp Trp Thr Ala Gly Ala Val Glu Leu Leu Thr Asp Ala Arg Pro
385                 390                 395                 400
Trp Pro Glu Thr Asp Arg Pro Arg Arg Ala Gly Val Ser Ser Phe Gly
                405                 410                 415
Val Ser Gly Thr Asn Ala His Val Leu Leu Glu Ala His Pro Ala Gly
            420                 425                 430
Glu Pro Pro Ala Glu Glu Pro Ser Ala Ser Lys Pro Gly Glu Pro Leu
        435                 440                 445
```

Figure 11 A

```
Ile Ala Thr Pro Leu Thr Pro Leu Pro Val Ser Ala Arg Thr Ala Thr
    450                 455                 460
Ala Leu Asp Gly Gln Val Arg Arg Leu Arg Glu His Leu Ala Ala Arg
465                 470                 475                 480
Pro Gly His Asp Pro Arg Ala Ile Ala Ala Gly Leu Leu Ala Arg Arg
                485                 490                 495
Thr Thr Phe Pro His Arg Ala Val Leu Leu Asp Asp Asp Val Val Thr
            500                 505                 510
Gly Thr Ala Leu Thr Glu Pro Arg Thr Val Phe Val Phe Pro Gly Gln
        515                 520                 525
Gly Pro Gln Trp Arg Gly Met Gly Val Glu Leu Met Ala Ala Ser Pro
    530                 535                 540
Val Phe Ala Ala Arg Met Arg Gln Cys Ala Asp Ala Leu Ile Pro His
545                 550                 555                 560
Thr Gly Trp Asp Pro Ile Ala Met Leu Asp Asp Pro Glu Val Thr Arg
                565                 570                 575
Arg Val Asp Val Val His Pro Val Cys Trp Ala Val Met Val Ser Leu
            580                 585                 590
Ala Ala Val Trp Glu Ala Ala Gly Val Arg Pro Asp Ala Val Ile Gly
        595                 600                 605
His Ser Gln Gly Glu Ile Ala Ala Ala Cys Val Ala Gly Ala Leu Thr
    610                 615                 620
Leu Glu Asp Gly Ala Arg Leu Val Ala Leu Arg Ser Val Leu Leu Leu
625                 630                 635                 640
Leu Arg Glu Leu Ala Gly Arg Gly Ala Met Gly Ser Val Ala Leu Pro
                645                 650                 655
Ala Ala Asp Val Glu Ala Asp Ala Ala Arg Ile Asp Gly Val Trp Val
            660                 665                 670
Ala Gly Arg Asn Gly Ala Thr Thr Thr Thr Val Ala Gly Arg Pro Asp
        675                 680                 685
Ala Val Glu Thr Leu Ile Ala Asp Tyr Glu Ala Arg Gly Val Trp Val
    690                 695                 700
Arg Arg Ile Ala Val Asp Cys Pro Thr His Thr Pro Phe Val Asp Pro
705                 710                 715                 720
Leu Tyr Asp Glu Leu Gln Arg Ile Val Ala Asp Thr Thr Ser Arg Thr
                725                 730                 735
Pro Glu Ile Pro Trp Phe Ser Thr Ala Asp Glu Arg Trp Ile Asp Ala
            740                 745                 750
Pro Leu Asp Asp Glu Tyr Trp Phe Arg Asn Met Arg His Pro Val Gly
        755                 760                 765
Phe Ala Thr Ala Val Thr Ala Ala Arg Glu Pro Gly Asp Thr Val Phe
    770                 775                 780
Val Glu Val Ser Ala His Pro Val Leu Leu Pro Ala Ile Asp Gly Ala
785                 790                 795                 800
Thr Val Ala Thr Leu Arg Arg Gly Gly Gly Val His Arg Leu Leu Thr
                805                 810                 815
Ala Leu Ala Glu Ala His Thr Thr Gly Val Pro Val Asp Trp Ala Ala
            820                 825                 830
Val Val Pro Ala Thr Ala Thr Ala His Asp Leu Pro Thr Tyr Ala Phe
        835                 840                 845
His His Glu Arg Tyr Trp Ile Ser His Trp Leu Pro Ser Gly Glu Ala
    850                 855                 860
His Pro Arg Pro Ala Asp Asp Thr Glu Ser Gly Thr Gly Arg Thr Glu
865                 870                 875                 880
Ala Ser Pro Pro Arg Pro His Asp (SEQ ID NO:4)
                885
```

Figure 11 B

```
Met His Val Pro Gly Glu Glu Asn Gly Glu Pro Leu Ala Ile Val Gly
 1               5                  10                  15
Met Ala Cys Arg Leu Pro Gly Gly Val Ala Ser Pro Glu Asp Leu Trp
            20                  25                  30
Arg Leu Leu Glu Ser Gly Gly Asp Gly Ile Thr Ala Phe Pro Thr Asp
        35                  40                  45
Arg Gly Trp Asp Val Asp Gly Leu Tyr Asp Pro Asp Pro Asp His Pro
    50                  55                  60
Gly Thr Ser Thr Val Arg His Gly Gly Phe Leu Ala Gly Val Ala Asp
65                  70                  75                  80
Phe Asp Ala Ala Phe Phe Gly Ile Ser Pro Arg Glu Ala Leu Ala Met
                85                  90                  95
Asp Pro Gln Gln Arg Leu Val Leu Glu Thr Ser Trp Glu Ala Leu Glu
            100                 105                 110
His Ala Gly Ile Leu Pro Glu Ser Leu Arg Gly Ser Asp Thr Gly Val
        115                 120                 125
Phe Met Gly Ala Phe Ser Asp Gly Tyr Gly Leu Gly Thr Asp Leu Gly
    130                 135                 140
Gly Phe Gly Ala Thr Gly Thr Gln Thr Ser Val Leu Ser Gly Arg Leu
145                 150                 155                 160
Ser Tyr Phe Tyr Gly Leu Glu Gly Pro Ala Val Thr Val Asp Thr Ala
                165                 170                 175
Gln Ser Ser Ser Leu Val Ala Leu His Gln Ala Gly Gln Ser Leu Arg
            180                 185                 190
Ser Gly Glu Cys Ser Leu Ala Leu Val Gly Gly Val Thr Val Met Ala
        195                 200                 205
Ser Pro Ser Gly Phe Val Glu Phe Ser Gln Gln Arg Gly Leu Ala Pro
    210                 215                 220
Asp Ala Arg Cys Lys Ala Phe Ala Asp Ala Ala Asp Gly Thr Gly Phe
225                 230                 235                 240
Ala Glu Gly Ser Gly Val Leu Ile Val Glu Arg Leu Ser Asp Ala Glu
                245                 250                 255
Arg Asn Gly His Arg Val Leu Ala Val Val Arg Gly Ser Ala Val Asn
            260                 265                 270
Gln Asp Gly Ala Ser Asn Gly Leu Ser Ala Pro Asn Gly Pro Ser Gln
        275                 280                 285
Glu Arg Val Ile Arg Gln Ala Leu Ala Asn Ala Gly Leu Thr Pro Ala
    290                 295                 300
Asp Val Asp Ala Val Glu Ala His Gly Thr Gly Thr Arg Leu Gly Asp
305                 310                 315                 320
Pro Ile Glu Ala Gln Ala Val Leu Ala Thr Tyr Gly Gln Gly Arg Asp
                325                 330                 335
Thr Pro Val Leu Leu Gly Ser Leu Lys Ser Asn Ile Gly His Thr Gln
            340                 345                 350
Ala Ala Ala Gly Val Ala Gly Val Ile Lys Met Val Leu Ala Met Arg
        355                 360                 365
His Gly Thr Leu Pro Arg Thr Leu His Val Asp Thr Pro Ser Ser His
    370                 375                 380
Val Asp Trp Thr Ala Gly Ala Val Glu Leu Leu Thr Asp Ala Arg Pro
385                 390                 395                 400
Trp Pro Glu Thr Asp Arg Pro Arg Arg Ala Gly Val Ser Ser Phe Gly
                405                 410                 415
Val Ser Gly Thr Asn Ala His Val Leu Leu Glu Ala His Pro Ala Gly
            420                 425                 430
Glu Pro Pro Ala Glu Glu Pro Ser Ala Ser Lys Pro Gly Glu Pro Leu
        435                 440                 445
```

Figure 12 A

```
Ile Ala Thr Pro Leu Thr Pro Leu Pro Val Ser Ala Arg Thr Ala Thr
    450                 455                 460
Ala Leu Asp Gly Gln Val Arg Arg Leu Arg Glu His Leu Ala Ala Arg
465                 470                 475                 480
Pro Gly His Asp Pro Arg Ala Ile Ala Ala Gly Leu Leu Ala Arg Arg
                485                 490                 495
Thr Thr Phe Pro His Arg Ala Val Leu Leu Asp Asp Asp Val Val Thr
            500                 505                 510
Gly Thr Ala Leu Thr Glu Pro Arg Thr Val Phe Val Phe Pro Gly Gln
        515                 520                 525
Gly Pro Gln Trp Arg Gly Met Gly Val Glu Leu Met Ala Ala Ser Pro
    530                 535                 540
Val Phe Ala Ala Arg Met Arg Gln Cys Ala Asp Ala Leu Ile Pro His
545                 550                 555                 560
Thr Gly Trp Asp Pro Ile Ala Met Leu Asp Asp Pro Glu Val Thr Arg
                565                 570                 575
Arg Val Asp Val Val His Pro Val Cys Trp Ala Val Met Val Ser Leu
            580                 585                 590
Ala Ala Val Trp Glu Ala Ala Gly Val Arg Pro Asp Ala Val Ile Gly
        595                 600                 605
His Ser Gln Gly Glu Ile Ala Ala Ala Cys Val Ala Gly Ala Leu Thr
    610                 615                 620
Leu Glu Asp Gly Ala Arg Leu Val Ala Leu Arg Ser Val Leu Leu Leu
625                 630                 635                 640
Leu Arg Glu Leu Ala Gly Arg Gly Ala Met Gly Ser Val Ala Leu Pro
                645                 650                 655
Ala Ala Asp Val Glu Ala Asp Ala Ala Arg Ile Asp Gly Val Trp Val
            660                 665                 670
Ala Gly Arg Asn Gly Ala Thr Thr Thr Thr Val Ala Gly Arg Pro Asp
        675                 680                 685
Ala Val Glu Thr Leu Ile Ala Asp Tyr Glu Ala Arg Gly Val Trp Val
    690                 695                 700
Arg Arg Ile Ala Val Asp Cys Pro Thr His Thr Pro Phe Val Asp Pro
705                 710                 715                 720
Leu Tyr Asp Glu Leu Gln Arg Ile Val Ala Asp Thr Thr Ser Arg Thr
                725                 730                 735
Pro Glu Ile Pro Trp Phe Ser Thr Ala Asp Glu Arg Trp Ile Asp Ala
            740                 745                 750
Pro Leu Asp Asp Glu Tyr Trp Phe Arg Asn Met Arg His Pro Val Gly
        755                 760                 765
Phe Ala Thr Ala Val Thr Ala Ala Arg Glu Pro Gly Asp Thr Val Phe
    770                 775                 780
Val Glu Val Ser Ala His Pro Val Leu Leu Pro Ala Ile Asp Gly Ala
785                 790                 795                 800
Thr Val Ala Thr Leu Arg Arg Gly Gly Gly Val His Arg Leu Leu Thr
                805                 810                 815
Ala Leu Ala Glu Ala His Thr Thr Gly Val Pro Val Asp Trp Ala Ala
            820                 825                 830
Val Val Pro Ala Thr Ala Thr Ala His Asp Leu Pro Thr Tyr Ala Phe
        835                 840                 845
His His Glu Arg Tyr Trp Ile Ser His Trp Leu Pro Ser Gly Glu Ala
    850                 855                 860
His Pro Arg Pro Ala Asp Asp Thr Glu Ser Gly Thr Gly Arg Thr Glu
865                 870                 875                 880
Ala Ser Pro Pro Arg Pro His Asp (SEQ ID NO:5)
                885
```

Figure 12 B